Delta Operations for Salmonids and Sturgeon (DOSS) Group
Conference call: 11/5/13 at 9:00 a.m.

Objective: Provide advice to the Water Operations Management Team (WOMT) and National Marine Fisheries Service (NMFS) on measures to reduce adverse effects from Delta operations of the Central Valley Project and the State Water Project on salmonids and green sturgeon. DOSS will work with other technical teams. DOSS notes and advice can be found at: http://www.westcoast.fisheries.noaa.gov/central_valley/water_operations/doss.html.

DWR: Mike Ford, Edmund Yu, Kevin Reece, Farida Islam, Dan Yamanaka
FWS: Craig Anderson, Leigh Bartoo
NMFS: Barbara Rocco, Jeff Stuart, Barb Byrne, Garwin Yip
Reclamation: Russ Yaworsky, Josh Israel
DFW: Chris McKibbin, Colin Purdy, Bob Fujimura
SWRCB: Scott Ligare
EPA, USGS: not present

Agenda
1. Fish monitoring
2. Current operations
3. Check in on RPA actions
4. Smelt update—report on fall midwater trawl
5. DOSS advice

Fish Monitoring: The following table presents fish monitoring data. Unless otherwise noted, reported sizes are fork length. See also: http://www.water.ca.gov/swp/operationscontrol/calfed/calfedmonitoring.cfm.

Location	Chipps Is. Midwater Trawl	Sacramento Trawls	Mossdale Kodiak Trawl	GCID	Knights Landing RST	Tisdale RST	Beach Seines
Sample Date	10/28, 30, 11/1	10/28, 30, 11/1	10/28, 30, 11/1	10/29-11/3	10/29–11/3	10/29–11/3	10/28–11/1
Total Catch	**0**	**0**	**0**	**139**	**0**	**1**	**0**
FR				1			
WR				126			
SR				7		1 (36 mm)	
LFR				5			
Ad-Clipped Chinook							
DS							
Splittail							
Longfin							
SH (ad-clip)							
SH (wild)							
W. Temp. (avg. °F)	60.4	58.6	57.6	61.0	58.0	56.1	14.4
Flows (avg. cfs)					5,441	5,634	
Turbidity (avg.	17.6	6.6	12.7	1.55	4.4	6.3	9.4

NTU)							
WR/LFR Avg. CPUE				1.14			
FR/SR Avg. CPUE						0.005	

CPUE = catch per unit of effort; ACT = acoustic tag; GCID = Glenn–Colusa Irrigation District; RST = rotary screw trap
[1]Note that FTU is used at Knight's Landing in place of NTU

Mokelumne Releases: On 11/1, Mokelumne River Hatchery released 100,000 yearling Chinook into the Mokelumne River at the hatchery. These fish are 100% coded wire tagged with an adipose clip.

Knights Landing: On 11/1, monitoring was changed to a schedule of two trap checks/day—one in early morning and one in the afternoon.

Fish Salvage: Bob Fujimura (DFW) reported that no Chinook salmon, rainbow/steelhead trout, green or white sturgeon, or longfin or delta smelt were salvaged from 10/1 through 11/3. No listed species were reported in the preliminary salvage results from 11/4.

Operations (11/5/13)

SWP		**CVP**	
Exports (cfs)			
Clifton Court Forebay	3,000	Jones Pumping Plant	2,000 (will add a third unit on 11/7 to increase to 2,500; Delta outflow is controlling combined pumping)
Reservoir Releases (cfs)			
Feather - Oroville	1,750	American - Nimbus	1,300 (will remain through December; releasing 500 through lower outlets for temperature management)
		Sacramento - Keswick	5,200 (reduced by 200/day until 11/10 to reach 4,250; will reassess for making additional cuts)
		Stanislaus - Goodwin	350 (11/7 will reduce to 250)
Reservoir Storage (in TAF, % of capacity)			
San Luis (SWP)	191	San Luis (CVP)	255 (26)
Oroville	1,500	Shasta	1,720
New Melones		Folsom	283
Delta Operations			
DCC	Closed on 11/4. (will open on 11/8 and close on 11/12 after holiday weekend; closed for Rio Vista flow standard)	Sacramento River at Freeport (cfs)	9,950
Outflow Index (cfs)	4,700	San Joaquin River (cfs) at Vernalis	1,340 (because of reductions at Goodwin,

			Vernalis will continue to decline; will settle at 900 to 1,000 in a few days)
Total Delta Inflow (cfs)		OMR (daily) (cfs)	
Water Temperature (°F)		OMR 5-day avg (cfs)	
X2 (km)		OMR 14-day avg (cfs)	
E/I (%)			

Weather: No precipitation is expected over the weekend but a wetter weather pattern could manifest late this week or by mid-month.

RPA Actions:

- IV.1.1: No alerts tripped in the past week.
- IV.1.2: No triggers exceeded in the past week.
- IV.3: In effect as of 11/1; no triggers exceeded yet.

Smelt Working Group (SWG): SWG has not yet met. Previous SWG meeting notes are available at: http://www.fws.gov/sfbaydelta/cvp-swp/smelt_working_group.cfm. Based on the September and October fall midwater trawls, Leigh Bartoo (FWS) reported that the current recovery index is 4, which is the third lowest on record. Smelt numbers are very low right now. Delta smelt were caught at two stations in the Sacramento River/Montezuma Slough region and at one station in the Suisun Bay region. The abundance and distributional recovery criteria were not met as described in the 1995 USFWS Sacramento–San Joaquin Delta Native Fishes Recovery Plan.

The annual fall midwater trawl index, used to set annual take for delta smelt, is based on sampling conducted in September, October, November, and December; therefore, we won't have that number until late December. The recovery index does not directly affect water operations; SWG members will track monitoring and salvage data very closely.

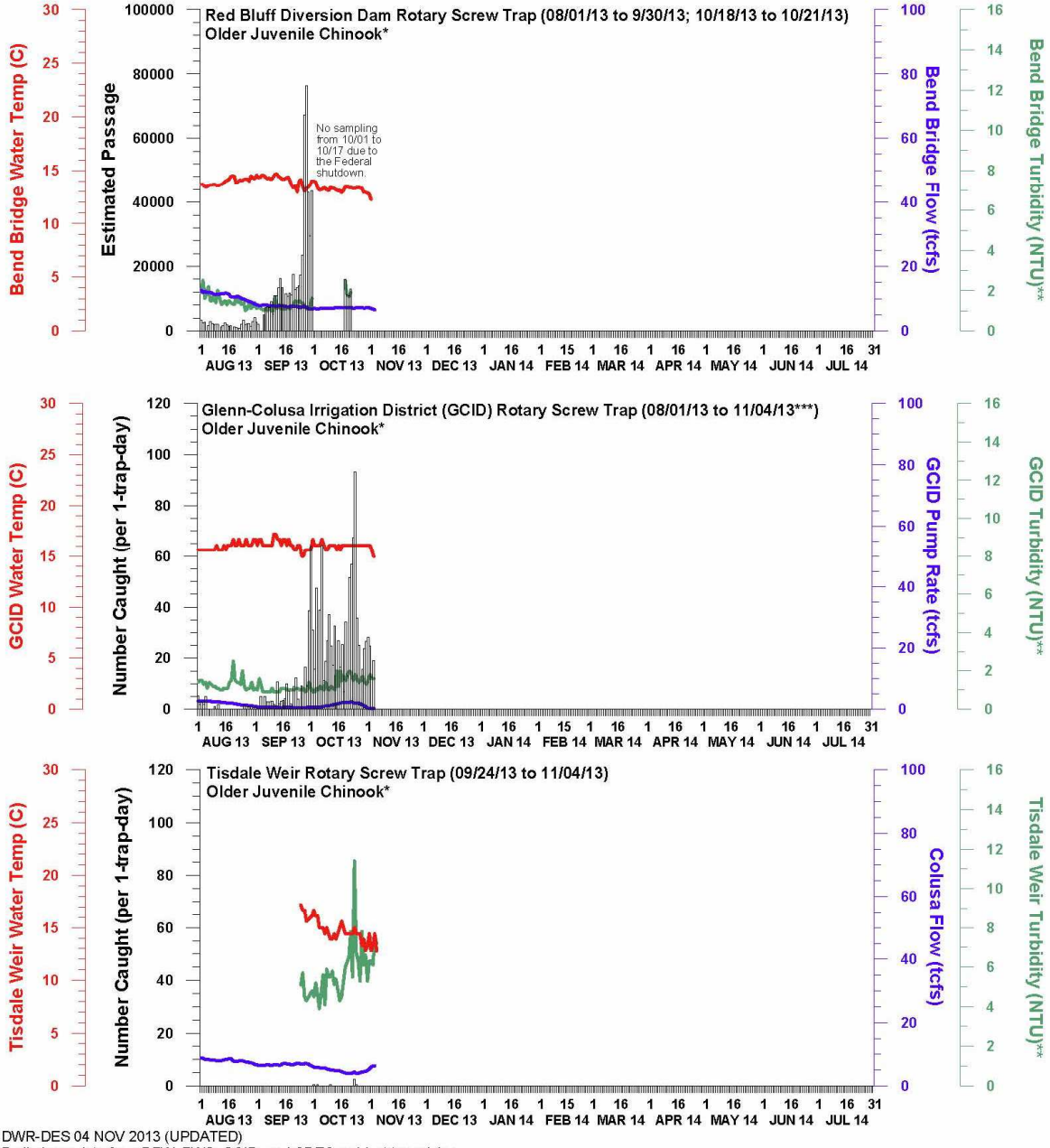
DOSS advice to WOMT and NMFS: None.

Annual Review: The annual review begins tomorrow, 11/6, at 9:00 a.m.

Next Meeting: The next DOSS conference call will be on 11/12/13 at 9:00 a.m.

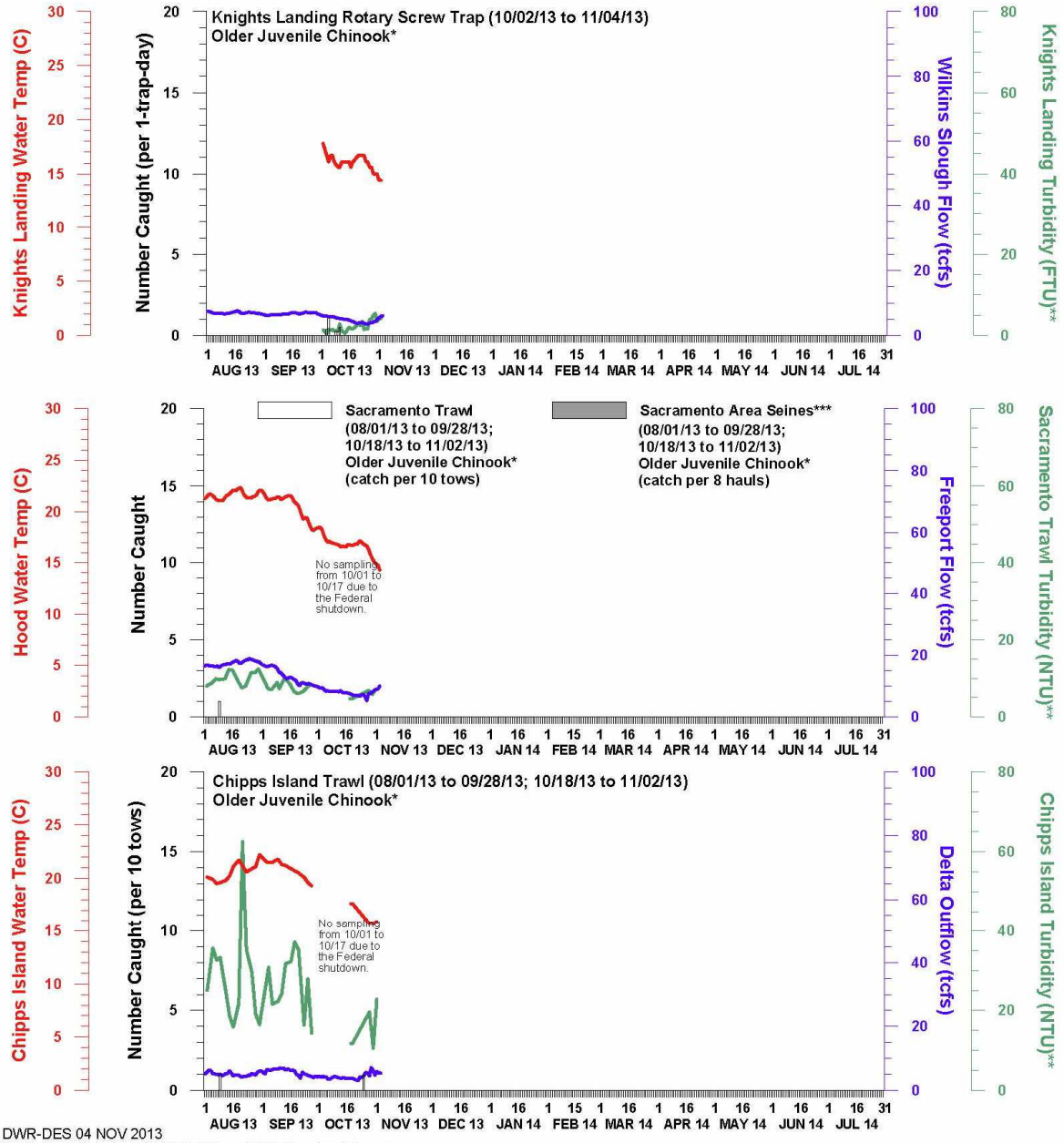
Below are graphs provided by DWR for Chinook salmon and steelhead observed at monitoring locations in the Sacramento and San Joaquin rivers and Delta. For additional graphs, please visit the DWR website at:
http://www.water.ca.gov/swp/operationscontrol/calfed/calfedmonitoring.cfm.

NUMBER OF UNMARKED OLDER JUVENILE CHINOOK MEASURED IN THE SACRAMENTO RIVER



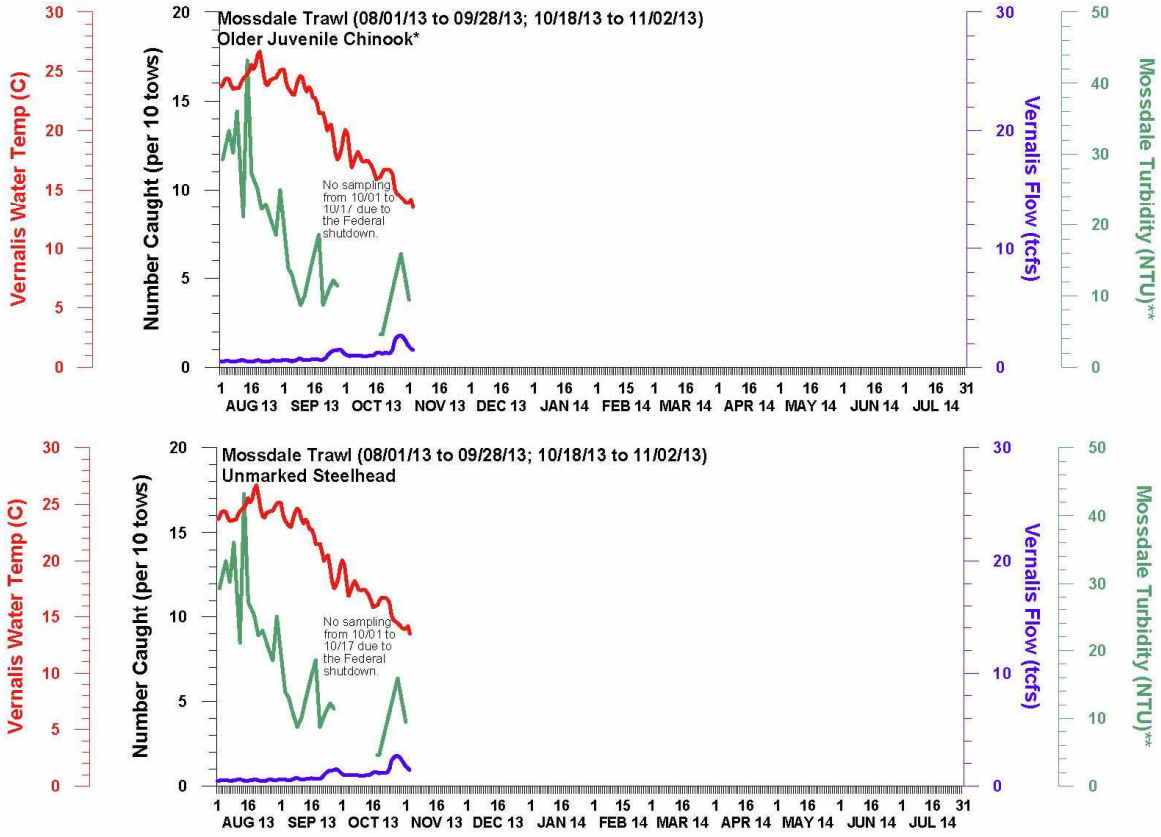
DWR-DES 04 NOV 2013 (UPDATED)
Preliminary data from DFW, FWS, GCID, and CDEC; subject to revision.
*Older juvenile Chinook defined as all Chinook greater than or equal to the minimum winter run length-at-date criteria and less than the maximum size included in the length-at-date criteria (Frank Fisher model) for which a race is assigned on a given sampling date.
**Turbidity is a discrete measurement and is not measured continuously. Therefore, data are interpolated on days when turbidity was not measured.
***GCID: Five older juveniles caught on 9/25, 9 older juveniles caught on 9/27, and 57 older juveniles caught on 10/5. However, catch could not be standardized to 1-trap day since hours fished could not be calculated due to problems with the cone clicker. As a result, data are not presented on the graph.

NUMBER OF UNMARKED OLDER JUVENILE CHINOOK MEASURED IN THE LOWER SACRAMENTO RIVER AND CHIPPS ISLAND



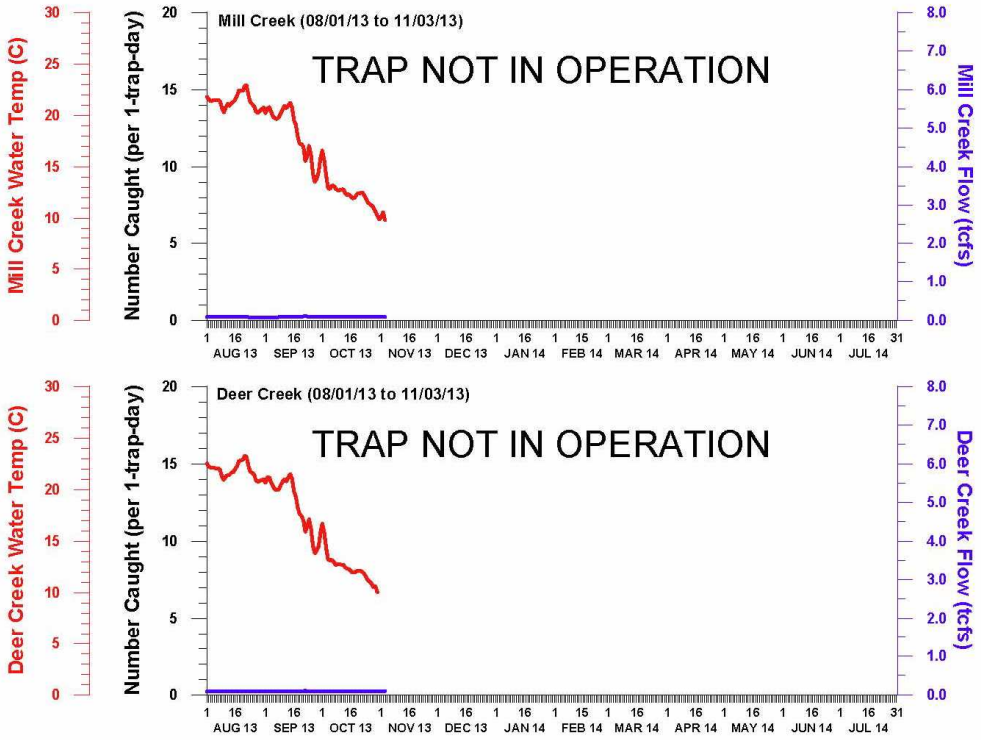
DWR-DES 04 NOV 2013
Preliminary data from DFW, FWS, and CDEC; subject to revision.
*Older Juvenile Chinook defined as all Chinook greater than or equal to the minimum winter run length-at-date criteria and less than the maximum size included in the length-at-date criteria (Frank Fisher Model) for which a race is assigned on a given sampling date.
**Turbidity is a discrete measurement and is not measured continuously. Therefore, data are interpolated on days when turbidity was not measured. Knights Landing turbidity measured in FTU, which should be roughly equivalent to NTU.
***Sacramento area seine route consists of the following seine sites: Verona, Elkhorn, Sand Cove, Discovery Park, American River, Miller Park, Sherwood Harbor, and Garcia Bend. Bars are stacked if Chinook caught from the trawl and seines are from the same day.

NUMBER OF UNMARKED OLDER JUVENILE CHINOOK AND STEELHEAD MEASURED IN THE SAN JOAQUIN RIVER



DWR-DES O4 NOV 2013
Preliminary data from FWS and CDEC; subject to revision.
*Older juvenile Chinook defined as all Chinook greater than or equal to the minimum winter run length-at-date criteria and less than the maximum size included in the length-at-date criteria (Frank Fisher model) for which a race is assigned on a given sampling date.
**Turbidity is a discrete measurement and is not measured continuously. Therefore, data are interpolated on days when turbidity was not measured.

WATER TEMPERATURE AND FLOW MEASURED AT MILL AND DEER CREEK



DWR-DES 04 NOV 2013 (UPDATED)
Preliminary data from CDEC; subject to revision.